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PN/ PNFP: Publication Number

PD : Publication Date

PA: Patent Assignee

IN: Inventor

TI: Title

AB: Abstract

GRANTED: Date "B" specification published

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PUBLISHED "A" SPECS

ADULT STEM CELLS -66 Documents

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PN - WO2009026472 A1 20090226

PD - 2009-02-26

PA - GEN HOSPITAL CORP [US]; SYKES MEGAN [US]

IN - SYKES MEGAN [US]

TI - METHODS FOR INDUCING TOLERANCE

AB - Methods of inducing tolerance, and promoting graft acceptance, are described herein.

The methods include administering to a recipient hematopoietic stem cells and an agonist of

Programmed Death 1 (PD-1).

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PN - WO2009026392 A1 20090226

PD - 2009-02-26

PA - HISTOGENICS CORP [US]

IN - SHORTKROFF SONYA [US]; KHOURY JOSEPH [US]; TARRANT LAURENCE J B

[US]; CLAESSON HANS P I [US]; SMITH ROBERT LANE [US]

TI - A METHOD FOR IMPROVEMENT OF DIFFERENTIATION OF MESENCHYMAL

STEM CELLS USING A DOUBLE-STRUCTURED TISSUE IMPLANT

AB - A double-structured tissue implant (DSTI) and a method for preparation and use thereof for implantation into tissue defects. The double-structured tissue implant for differentiation, growth and transformation of cells, stem cells, mesenchymal stem cells and bone marrow stem cells. DSTI comprising a primary scaffold and a secondary scaffold consisting of a soluble collagen solution in combination with a non-ionic surfactant generated and positioned within the primary scaffold.

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PN - WO2009026106 A1 20090226

PD - 2009-02-26

PA - US GOVERNMENT [US]; ANDROUTSELLIS-THEOTOKIS ANDREA [US]; MCKAY RONALD D G [US]

IN - ANDROUTSELLIS-THEOTOKIS ANDREA [US]; MCKAY RONALD D G [US]

TI - METHODS FOR PROMOTING STEM CELL PROLIFERATION AND SURVIVAL

AB - Methods are disclosed herein for increasing the number of stem cells or precursor cells. The number of stem cells can be increased by increasing survival and/or cell proliferation of the cells. The methods include contacting the cells with an effective amount of a Notch ligand, an effective amount of a growth factor, and an effective amount of angiopoietin-2 (Ang-2). In several embodiments, the methods include contacting the cells with an effective amount of a Jak inhibitor. In several non-limiting examples, the growth factor is insulin or glial derived neurotrophic factor (GDNF),

or a combination thereof. In additional non-limiting examples, the Notch ligand is Delta. The cells can be in vivo or in vitro.

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PN - WO2009025722 A1 20090226
PD - 2009-02-26
PA - REGENETECH INC [US]; DENNIS ROBERT G [US]; WOLF DAVID A [US]; RUDD DONNIE [US]
IN - DENNIS ROBERT G [US]; WOLF DAVID A [US]; RUDD DONNIE [US]
TI - METHOD AND COMPOSITION FOR REPAIRING HEART TISSUE
AB - A method of expanding blood stem cells for the repair of heart tissue and/or function, and compositions resulting from the expansion method in a rotating bioreactor. This invention also relates to a method of TVEMF-expanding blood stem cells for the repair of heart tissue and/or function, and compositions resulting from the TVEMF-expansion in the TVEMF-bioreactor.

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PN - WO2009025827 A1 20090226
PD - 2009-02-26
PA - REGENETECH INC [US]; RUDD DONNIE [US]; DENNIS ROBERT G [US]; WOLF DAVID A [US]
IN - RUDD DONNIE [US]; DENNIS ROBERT G [US]; WOLF DAVID A [US]
TI - METHOD AND COMPOSITION FOR REPAIRING EPITHELIAL AND OTHER CELLS AND TISSUE
AB - A method for preparing a pharmaceutical blood stem cell composition by expanding CD133+ stem cells or TVEMF-expanding blood stem cells, wherein the expansion takes place in a rotating bioreactor or a TVEMF-bioreactor, to compositions resulting from the expanded or TVEMF-expanded cells, and to uses of the composition in treating an epithelial cell/tissue related disease or condition or repairing tissue of skin mouth or ear with the compositions.

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PN - WO2009025723 A1 20090226
PD - 2009-02-26
PA - REGENETECH INC [US]; DENNIS ROBERT G [US]; WOLF DAVID A [US]; RUDD DONNIE [US]
IN - DENNIS ROBERT G [US]; WOLF DAVID A [US]; RUDD DONNIE [US]
TI - METHOD AND COMPOSITION FOR TREATING A DIABETIC CONDITION
AB - A method for the treatment of a diabetic condition wherein expanded and TVEMF-expanded blood stem cells that have been expanded in a rotating three-dimensional system are used for the treatment of a diabetic condition. Also disclosed are compositions resulting from methods and processes of expanding an TVEMF-expanding the cells.

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PN - WO2009024748 A1 20090226
PD - 2009-02-26
PA - REINNERVATE LTD [GB]; PRZBORSKI STEFAN [GB]; CROFT ADAM [GB]
IN - PRZBORSKI STEFAN [GB]; CROFT ADAM [GB]
TI - STEM CELL DERIVED NEUROTROPHIC FACTORS
AB - We disclose a method for promoting the differentiation of neural stem cells comprising co-culturing induced mesenchymal stem cells and neural stem cells/progenitor cells in a cell culture system that facilitates the production of differentiated neurones.

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PN - EP2030617 A1 20090304
PD - 2009-03-04
PA - SYGNIS BIOSCIENCE GMBH & CO KG [DE]
IN - SCHNEIDER ARMIN [DE]; MORARU ANJA [DE]; KRUEGER CAROLA [DE]; LAAGE RICO [DE]; PITZER CLAUDIA [DE]
TI - Use of tranilast and derivatives thereof for the therapy of neurological conditions

AB - The present invention relates to the use of tranilast and derivatives thereof for the preparation of a pharmaceutical composition for treating and/or preventing a neuronal condition where there is a need of neuroprotection and neuroregeneration. The invention furthermore relates to the use of tranilast and derivatives thereof for the in vitro differentiation of neuronal stem cells and the use of such pre-treated cells for stem cell therapy von neurological conditions.

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PN - EP2027255 A2 20090225
PD - 2009-02-25
PA - UNIV EBERHARD KARLS [DE]
IN - WENDEL HANS-PETER [DE]; GUO KETAI [DE]; SCHAEFER RICHARD [DE]
TI - DEVICE AND SUBSTANCE FOR ISOLATING MESENCHYMAL STEM CELLS (MSC)

AB - The invention relates to: a device comprising a surface that comes into contact with biological tissue and/or with liquid, said surface being coated at least partially with a substance that mediates the binding of mesenchymal stem cells (MSC); a method for binding and/or isolating MSC from biological tissue and/or liquid; a nucleic acid molecule that binds to MSC in a selective and highly-specific manner; the use of the nucleic acid molecule for binding and/or isolating MSC from biological tissue and/or liquid; and to a method for producing a device of this type.

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PN - EP2026807 A1 20090225
PD - 2009-02-25
PA - UNI DEGLI STUDI DI TORINO [IT]
IN - PONZETTO ANTONIO [IT]; GENNERO LUISA [IT]; ROOS MARIA AUGUSTA [IT]; PESCARMONA GIAN PIERO [IT]; DENYSENKO TETYANA [IT]; DI NARDO PAOLO [IT]; SANGIORGIO ROBERTO [IT]
TI - USE OF PARASYMPATHOLYTIC SUBSTANCES TO ENHANCE AND ACCELERATE STEM CELL DIFFERENTIATION, RELATED METHOD AND COMPOSITIONS

AB - The invention refers to the in vitro and in vivo use of parasympatholytic substances, preferably scopolamine, to potentiate and accelerate the differentiation of stem cells into cells with a tissue-specific phenotype, and the process and compositions related thereto.

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PN - WO2009023566 A2 20090219
PD - 2009-02-19
PA - GENZYME CORP [US]; LODIE TRACEY [US]; YOUNG MICHAEL [US]; TUBO ROSS [US]; EISENBEIS SCOTT [US]
IN - LODIE TRACEY [US]; YOUNG MICHAEL [US]; TUBO ROSS [US]; EISENBEIS SCOTT [US]
TI - METHOD OF TREATING AUTOIMMUNE DISEASE WITH MESENCHYMAL STEM CELLS

AB - Methods and compositions for treating an autoimmune disease, such as new onset type 1 diabetes (T1D) in a subject using autologous or allogeneic mesenchymal stem cells administered to the subject prior to autoimmune-induced complete depletion of insulin-producing pancreatic beta cells, e.g., within six months of new onset type 1 diabetes (T1D) diagnosis or prior to the onset of disease in a subject determined to be at high risk for T1D.

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PN - WO2009023525 A2 20090219
PD - 2009-02-19
PA - DHARMACON INC [US]; FEDEROV YURIY [US]; LEAKE DEVIN [US]
IN - FEDEROV YURIY [US]; LEAKE DEVIN [US]
TI - METHODS OF MODULATING MESENCHYMAL STEM CELL DIFFERENTIATION

AB - The present disclosure includes compositions and methods for modulating the differentiation of cells having osteogenic differentiation potential (such as mesenchymal stem cells (MSCs)) towards the osteogenic fate, and for obtaining diagnostic and prognostic information relating

to diseases and disorders characterized by defects in osteogenic differentiation. The compositions include miRNAs, rmRNA mimics, miRNA inhibitors, and siRNAs.

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PN - WO2009023251 A1 20090219
PD - 2009-02-19
PA - SANBIO INC [US]; MORI KEITA [US]; BOHN MARTHA D [US]; TATE CIARA [US]; AIZMAN IRINA [US]; GLAVASKI ALEKSANDRA [US]; VIRAG TAMAS [US]
IN - MORI KEITA [US]; BOHN MARTHA D [US]; TATE CIARA [US]; AIZMAN IRINA [US]; GLAVASKI ALEKSANDRA [US]; VIRAG TAMAS [US]
TI - METHODS AND COMPOSITIONS FOR TREATING NEURAL DEGENERATION
AB - Disclosed herein are methods and compositions for the use of marrow adherent stem cells and their descendents; e.g., bone marrow-derived neural regenerating cells; in the treatment of various neurodegenerative disorders. In certain embodiments, bone marrow-derived neural regenerating cells transplanted to sites of neural degeneration stimulate growth and/or survival of host neurons.

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PN - WO2009023246 A2 20090219
PD - 2009-02-19
PA - UNIV WAKE FOREST HEALTH [US]; ATALA ANTHONY [US]
IN - ATALA ANTHONY [US]
TI - PLURIPOTENT ADULT STEM CELLS
AB - Disclosed herein are pluripotent adult stem cells and methods of use thereof. The cells are found in, or collected from, an adult tissue or fluid. In some embodiments, the cells are c-kit positive and SSEA-4 positive, and can be differentiated into multiple tissue types, e.g., adipogenic, osteogenic, myogenic, endothelial, neurogenic and hepatic tissues.

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PN - EP2022848 A1 20090211
PD - 2009-02-11
PA - HUBRECHT INST [NL]
TI - A method for identifying, expanding, and removing adult stem cells and cancer stem cells
AB - The invention relates to the field of biochemistry, pharmacy and oncology. The invention particularly relates to the use of novel stem cell markers for the isolation of stem cells. The invention further relates to the obtained stem cells and their use in for example research or treatment, for example, for the preparation of a medicament for the treatment of damaged or diseased tissue. In one of the embodiments, the invention provides a method for obtaining (or isolating) stem cells comprising - optionally preparing a cell suspension from a tissue or organ sample - contacting said cell suspension with an Lgr4, 5 or 6 binding compound - identify the cells bound to said binding compound - optionally isolating the stem cells from said binding compound. The invention further relates to means suitable for cancer treatment and even more specific for the treatment of cancer by eradicating cancer stem cells.

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PN - EP2023717 A2 20090218
PD - 2009-02-18
PA - TAKEBE NAOKO [US]
IN - TAKEBE NAOKO [US]
TI - METHODS FOR COLLECTING AND USING PLACENTA CORD BLOOD STEM CELLS
AB - An innovative method of collecting cord blood stem cells from an isolated mammalian non-exsanguinated or partially exsanguinated placenta by placental perfusion is described. Placental perfusion can include perfusing the isolated placenta with a pulsatile flow of perfusion solution, for example, using a pulsatile or peristaltic pump or device. The stem cells can then be isolated from the perfusate. The perfusion solution can include an anticoagulant. The isolated mammalian placenta need not be treated with an anticoagulant prior to perfusing. The isolated placenta can be free from an anticoagulant prior to perfusing.

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PN - EP2024493 A2 20090218

PD - 2009-02-18

PA - STYXX LLC [US]

IN - ASKENASY NADIR [IL]

TI - METHODS OF SELECTING STEM CELLS AND USES THEREOF

AB - A method of selecting stem cells from a heterogeneous population of cells is disclosed. The method comprises contacting the population of cells with an apoptosis inducing agent under conditions which are apoptotic to non-stem cells and non-apoptotic to stem cells, thereby selecting the stem cells from the heterogeneous population of cells. The selected stem cells may then be used for a variety of applications including transplantation and differentiation.

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PN - WO2009021151 A1 20090212

PD - 2009-02-12

PA - PRIMEGEN BIOTECH LLC [US]; IZADYAR FARIBORZ [US]; PACCHIAROTTI JASON [US]; MAKI CHAD [US]; ROMAS THOMAS V [US]

IN - IZADYAR FARIBORZ [US]; PACCHIAROTTI JASON [US]; MAKI CHAD [US]; ROMAS THOMAS V [US]

TI - ISOLATION, CHARACTERIZATION AND PROPAGATION OF GERMLINE STEM CELLS

AB - Methods are provided for the isolation, characterization and propagation of germline stem cells from fetal and adult mammals. Additionally, isolated populations of germline cells having different phenotypes are disclosed wherein the subpopulations are capable of forming long-term cultures of multipotent or pluripotent cells or are capable of differentiating into mature germline cells and repopulating a sterile reproductive organ. The multipotent or pluripotent germline cells are also suitable for differentiation into tissue-specific somatic cells for therapeutic purposes.

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PN - WO2009020201 A1 20090212

PD - 2009-02-12 PA - KYOWA HAKKO KIRIN CO LTD [JP]; MIYAJI HIROMASA; IKKAKU MASAHIRO; SATO HIDETAKA

IN - MIYAJI HIROMASA; IKKAKU MASAHIRO; SATO HIDETAKA

TI - ISOLATED CELL MASS

AB - A cell is demanded which can exhibit an excellent ability of penetrating into a tissue and an excellent ability of adhering to a tissue in hematopoietic stem cell transplantation, repair of an injured tissue utilizing stem cell transplantation, or the like. Thus, disclosed are: a mass of cells having an excellent ability of penetrating into a tissue and an excellent ability of adhering to a tissue; a pharmaceutical agent comprising the cells; and a method for the transplantation of the cells. The cells are useful for hematopoietic stem cell transplantation, repair of an injured tissue utilizing stem cell transplantation, or the like.

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PN - WO2009019758 A1 20090212

PD - 2009-02-12

PA - BIO LINK INC [JP]; SUGAYA TAKESHI [JP]; SHINOZAKI NAOSHI [JP]

IN - SUGAYA TAKESHI [JP]; SHINOZAKI NAOSHI [JP]

TI - METHOD FOR ISOLATING RENAL STEM/PROGENITOR CELL, RENAL STEM/PROGENITOR CELL AND THERAPEUTIC AGENT FOR RENAL DISEASE

AB - It is intended to provide a method for noninvasively isolating a human renal stem/progenitor cell, an isolated renal stem/progenitor cell, a therapeutic agent for renal disease, a mouse mesenchymal cell which can be used for isolating a human renal stem/progenitor cell and a culture supernatant of the same. A renal stem/progenitor cell is isolated by primarily culturing a cell contained in the urine of a patient with renal disease in a medium containing a mouse mesenchymal cell identified by the deposition number of FERM ABP-10865 or a culture supernatant of the same, staining the obtained primarily cultured cell with Hoechst 33342 and separating a weak-positive or negative fraction.

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PN - WO2009018626 A1 20090212
PD - 2009-02-12
PA - MURDOCH CHILDRENS RES INST [AU]; NEWGREEN DONALD [AU]
IN - NEWGREEN DONALD [AU]
TI - A THERAPEUTIC PROTOCOL USING STEM CELLS IN TISSUE AND NEURONAL REPAIR, MAINTENANCE, REGENERATION AND AUGMENTATION
AB - The present invention relates generally to the field of tissue and neuronal repair, maintenance, regeneration and augmentation. More particularly, the present invention encompasses an improved stem cell therapeutic protocol.

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PN - EP2022846 A1 20090211
PD - 2009-02-11
PA - STELIC INST OF REGENERATIVE ME [JP]
IN - YONEYAMA HIROYUKI [JP]
TI - METHOD FOR ISOLATION OF STEM CELL
AB - The present inventors discovered for the first time that labeling cell nuclei makes it possible to efficiently isolate stem cells. Namely, it was elucidated that stem cells with labeled nuclei remained labeled even after cell division, and showed self-renewing and long-living abilities characteristic of stem cells. Efficient isolation of stem cells is possible, for instance, by labeling the nuclear of each cell in a heterogeneous cellular group followed by selecting those cells that maintain a labeled state even after cell division. The present invention provides methods for enabling visualization of stem cells of animal tissues in a living state by labeling using the essential functions of the stem cells, and methods for simply and easily isolating the stem cells in a fresh state without using at all genetic manipulation or artificial markers.

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PN - US2009028834 A1 20090129
PD - 2009-01-29
IN - SIEGEL HAL [US]; BENSON KASEY L [US]
TI - Methods and compositions for stimulating the proliferation or differentiation of stem cells with substance P or an analog thereof
AB - Compositions and methods are provided for stimulating cell proliferation and differentiation with substance P or a substance P analog. In one embodiment, the methods provide for stimulating or promoting stem cell differentiation by contacting a stem cell with substance P or a substance P analog. In another embodiment, the methods provide for administering to subject an effective amount of substance P or a substance P analog to treat an illness, disease or disorder.

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PN - WO2009017274 A1 20090205
PD - 2009-02-05
PA - KOREA RES INST OF BIOSCIENCE [KR]; CHOI INPYO [KR]; YOON SUKRAN [KR]; YUN SOHYUN [KR]; CHUNG JIN WOONG [KR]
IN - CHOI INPYO [KR]; YOON SUKRAN [KR]; YUN SOHYUN [KR]; CHUNG JIN WOONG [KR]
TI - AN AGENT FOR DIFFERENTIATING HEMATOPOIETIC STEM CELL INTO NATURAL KILLER CELL COMPRISING YC-1 OR IL-21 AND A METHOD OF DIFFERENTIATING HEMATOPOIETIC STEM CELL INTO NATURAL KILLER CELL USING THEREOF
AB - The present invention relates to an agent for differentiating hematopoietic stem cells into natural killer cells and a method for the differentiation, more precisely an agent for differentiating hematopoietic stem cells into natural killer cells comprising YC-I [3- (5 ' - hydroxymethyl-2 ' -furyl) -1-benzylindazole] or IL-21 (Interleukin-21) as an active ingredient and a method for differentiating hematopoietic stem cells into natural killer cells using the same. The YC-I and IL-21 regulate the differentiation of hematopoietic stem cells into natural killer cells and increase the killing activity of NK cells. Therefore, the agent for NK cell differentiation of the present invention can be effectively used for cell therapy for the treatment of cancer by regulating the differentiation of hematopoietic stem cells into natural killer cells having tumor cell killing activity.

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PN - WO2009017267 A1 20090205

PD - 2009-02-05

PA - REGENPRIME CO LTD [KR]; MIN BYOUNG-HYUN [KR]; PARK SO RA [KR]; PARK SANG-HYUG [KR]

IN - MIN BYOUNG-HYUN [KR]; PARK SO RA [KR]; PARK SANG-HYUG [KR]

TI - METHOD FOR DIFFERENTIATING MESENCHYMAL STEM CELL AND CULTURING CHONDROCYTES USING ALGINATE COATED FIBRIN/HA COMPOSITE SCAFFOLD

AB - The present invention relates to a method for differentiating mesenchymal stem cells and culturing chondrocytes using a fibrin/HA(hyaluronate) composite whose biocompatibility and durability are enhanced, and a therapeutic composition containing the fibrin/HA composite, and more particularly, to a method for culturing chondrocytes and differentiating mesenchymal stem cells into chondrocytes using an alginate-coated fibrin/HA composite gel and a composition for treating a cartilage disease and a composition for treating a disc disease using a fibrin/HA composite scaffold containing a fibrin degradation inhibitor. According to the present invention, disadvantages of the traditional fibrin/HA composite being reduced in size and easily degraded in a short time period during culture were overcome, so that cells can be cultured in a more stable environment. The treatment composition according to the present invention has superior biocompatibility and biodegradability and thus it can be used for effective treatment for cartilage diseases, and it can regenerate the nuclei pulposi of a new intervertebral disk unlike currently used surgical treatment of degenerative intervertebral disk disease, so that it is expected that fundamental treatment of disc diseases can be achieved.

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PN - WO2009017254 A1 20090205

PD - 2009-02-05

PA - ASUBIO PHARMA CO LTD [JP]; UNIV KEIO [JP]; HATTORI FUMIYUKI [JP]; FUKUDA KEIICHI [JP]

IN - HATTORI FUMIYUKI [JP]; FUKUDA KEIICHI [JP]

TI - METHOD FOR CONSTRUCTING MASS OF MYOCARDIAL CELLS AND USE OF THE MYOCARDIAL CELL MASS

AB - It is intended to improve the post-transplantation taking rate of myocardial cells which have been purified so that they are composed exclusively of myocardial cells and free from cells originating in other species. To solve the above problem, it has been discussed whether or not a cell mass of purified myocardial cells can be constructed. As the results, it has been clarified that the above-described problem can be solved by providing a method for constructing a cell of pluripotent stem cell-origin myocardial cells characterized by comprising dissociating an aggregated cell mass containing myocardial cells, which have been differentiated and derived from pluripotent stem cells, to give individual single cells, incubating the pluripotent stem cell-origin myocardial cells having been thus purified by using a medium under serum-free conditions and thus aggregating the cells.

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PN - WO2009016262 A1 20090205

PD - 2009-02-05

PA - UNIV SEVILLA [ES]; LOPEZ BARNEO JOSE [ES]; PARDAL RICARDO [ES]; ORTEGA-SAENZ PATRICIA [ES]; DURAN ROCIO [ES]; BONILLA HENAO VICTORIA EUGENIA [ES]; ORDONEZ FERNANDEZ ANTONIO [ES]; TOLEDO ARAL JUAN JOSE [ES]

IN - LOPEZ BARNEO JOSE [ES]; PARDAL RICARDO [ES]; ORTEGA-SAENZ PATRICIA [ES]; DURAN ROCIO [ES]; BONILLA HENAO VICTORIA EUGENIA [ES]; ORDONEZ FERNANDEZ ANTONIO [ES]; TOLEDO ARAL JUAN JOSE [ES]

TI - STEM CELLS DERIVED FROM THE CAROTID BODY AND USES THEREOF

AB - Adult stem cells obtained from the carotid body, characterized in that they are positive for the phenotypic marker GFAP (glial fibrillary acidic protein) and negative for the phenotypic markers TH (tyrosine hydroxylase) and nestin, are described. These stem cells can undergo proliferation, self-renewal and differentiation to progenitor cells and differentiated cells. Said stem cells, progenitor cells and differentiated cells, expanded by any method, can be used in the treatment of neurodegenerative diseases such as Alzheimer's disease or Parkinson's disease.

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PN - EP2019859 A2 20090204
PD - 2009-02-04
PA - UNIV LOUISIANA STATE [US]; ARTECEL INC [US]
IN - GIMBLE JEFFERY M [US]; LUDLOW JOHN W [US]
TI - ADIPOSE DERIVED ADULT STEM CELLS IN HEPATIC REGENERATION
AB - The present invention provides a method to derive hepatic stem cells from stem cells derived from non- liver tissue. In one embodiment of the invention, hepatic stem cells are derived from adipose stem cells. The invention also provides a method of enhancing hepatic cytokine production (e.g., HGF) from ASCs, which may be useful in the regeneration of liver tissue when transplanted in vivo. Tissue culture conditions, including media conditions, are provided.

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PN - EP2019861 A2 20090204
PD - 2007-11-08
PA - AZIENDA OSPEDALIERO UNIVERSITA [IT]
IN - ROMAGNANI PAOLA [IT]; MAGGI ENRICO [IT]; ROMAGNANI SERGIO [IT]
TI - KIDNEY-DERIVED STEM CELL POPULATION, IDENTIFICATION AND THERAPEUTIC USE
AB - A novel population of kidney-derived cells is described that exhibits surface co-expression of CD133 and CD24 markers; said cells possess stem cell capacity and are capable of undergoing tubulogenic, adipogenic, osteogenic and neurogenic differentiation.

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PN - WO2009014668 A2 20090129
PD - 2009-01-29
PA - STEMNION INC [US]; SING GEORGE L [US]; MARSHALL VIVIENNE S [US]; CLARKE DIANA L [US]; SMITH CHARLOTTE A [US]; ROBSON MARTIN C [US]
IN - SING GEORGE L [US]; MARSHALL VIVIENNE S [US]; CLARKE DIANA L [US]; SMITH CHARLOTTE A [US]; ROBSON MARTIN C [US]
TI - METHODS FOR PROMOTING HAIR GROWTH
AB - The invention is directed to methods for promoting hair growth. Such methods utilize novel compositions, including but not limited to extraembryonic cytokine secreting cells (herein referred to as ECS cells), including, but not limited to, amnion-derived multipotent progenitor cells (herein referred to as AMP cells), conditioned media derived therefrom (herein referred to as amnion-derived cellular cytokine solution or ACCS), cell lysates derived therefrom, and cell products derived therefrom, each alone or in combination.

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PN - WO2009014565 A2 20090129
PD - 2009-01-29
PA - LUDWIG INST FOR CANCER RES LTD [US]; UNIV SAO PAULO [BR]; SOCIEDADE BENEFICENTE ISRAELIT [BR]; CABALLERO OTAVIA L [US]; MARIE SUELY KAZUE NAGAHASHI [BR]; OBA SHINJO SUELI MIEKO [BR]; OKAMOTO OSWALDO KEITH [BR]
IN - CABALLERO OTAVIA L [US]; MARIE SUELY KAZUE NAGAHASHI [BR]; OBA SHINJO SUELI MIEKO [BR]; OKAMOTO OSWALDO KEITH [BR]
TI - METHODS FOR DIAGNOSING AND TREATING ASTROCYTOMAS
AB - The invention relates to the identification of astrocytoma markers, astrocytoma stem cells and markers of such stem cells, and diagnostic, prognostic and therapeutic methods based on an understanding of the markers and cells.

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PN - WO2009014272 A1 20090129
PD - 2009-01-29
PA - DONGGUK UNIVERSITY INDUSTRY AC [KR]; PARK JUNG-KEUG [KR]; YOON HEE-HOON [KR]; YOO BO-YOUNG [KR]; KIM YOUNG-JIN [KR]; SHIN YOUN-HO [KR]
IN - PARK JUNG-KEUG [KR]; YOON HEE-HOON [KR]; YOO BO-YOUNG [KR]; KIM YOUNG-JIN [KR]; SHIN YOUN-HO [KR]

TI - METHOD FOR THE PREPARATION OF DERMAL PAPILLA TISSUE EMPLOYING MESENCHYMAL STEM CELLS
AB - A method for the preparation of dermal papilla tissue comprising the step of culturing mesenchymal stem cells in a medium having a specific composition is provided. The method makes it possible to form in vitro a quantity of dermal papilla tissues having hair follicle inducing ability and, accordingly, it can be effectively used for the treatment of alopecia through cell transplantation.

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PN - WO2009012901 A2 20090129
OPD - 2007-07-25 PD - 2009-01-29
PA - FRAUNHOFER GES FORSCHUNG [DE]; KRUSE CHARLI [DE]; KAJAHN JENNIFER [DE]; GULDNER NORBERT W [DE]
IN - KRUSE CHARLI [DE]; KAJAHN JENNIFER [DE]; GULDNER NORBERT W [DE]
TI - MATERIAL COMPOSITIONS WHICH COMPRISE ADULT STEM CELLS OBTAINED FROM EXOCRINE GLANDULAR TISSUE, IN PARTICULAR FOR USE IN REGENERATIVE MEDICINE, E.G. FOR RESTORING INJURED OR DAMAGED MYOCARDIAL TISSUE
AB - The invention relates to material compositions comprising adult stem cells obtained from exocrine glandular tissue, and a carrier matrix in the form of a filament structure and/or of a mesh. The carrier matrix preferably consists of a plastic material which is tolerated by the body and can be degraded in the body. The material compositions of the invention are particularly suitable for use in regenerative medicine, e.g. for restoring injured or damaged myocardial tissue.

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PN - EP2019145 A1 20090128
PD - 2009-01-28 PA - UNIV CASE WESTERN RESERVE [US]
IN - GERSON STANTON L [US]
TI - Hematopoietic progenitor cell gene transduction
AB - Genetically engineered hematopoietic progenitor cells that carry within them genes of interest, particularly for the expression of physiologically or pharmacologically active proteins. The hematopoietic progenitor cells are transduced in the presence of human mesenchymal stem cells which enhance transduction efficiency.

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PN - WO2009012357 A2 20090122
PD - 2009-01-22
PA - GEN HOSPITAL CORP [US]; DONAHOE PATRICIA K [US]; SZOTEK PAUL P [US]; MACLAUGHLIN DAVID T [US]; PREFFER FREDERIC [US]; PIERETTI-VANMARCKE RAFAEL [US]; DOMBKOWSKI DAVID MICHAEL [US]
IN - DONAHOE PATRICIA K [US]; SZOTEK PAUL P [US]; MACLAUGHLIN DAVID T [US]; PREFFER FREDERIC [US]; PIERETTI-VANMARCKE RAFAEL [US]; DOMBKOWSKI DAVID MICHAEL [US]
TI - METHODS TO IDENTIFY AND ENRICH FOR POPULATIONS OF OVARIAN CANCER STEM CELLS AND SOMATIC OVARIAN STEM CELLS AND USES THEREOF
AB - The present invention relates to compositions and methods for treating, characterizing and diagnosing ovarian cancer. In particular, the present invention provides methods for treating and/or preventing ovarian cancer in a subject by administering to the subject an effective amount of Mullerian Inhibiting substance and/or an effective amount of an agent that inhibits BCRP1. The present invention further provides methods to identify and/or enrich for populations of ovarian cancer stem cells and populations of somatic ovarian stem cells, in particular, enrichment for populations of coelomic somatic ovarian stem cells, subcoelomic/stromal somatic ovarian stem cells and periphilar medullary somatic ovarian stem cells. The present invention also provides somatic ovarian stem cell markers and ovarian cancer stem cell markers, as well as methods to identify agents which selectively inhibit the proliferation of ovarian cancer stem cells as compared to somatic ovarian stem cells.

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PN - WO2009011546 A2 20090122
PNFP - WO2009011546 A3 20090312
PD - 2009-01-22

PA - CATHOLIC UNIVERSITY INDUSTRY A [KR]; OH IL HOAN [KR]
IN - OH IL HOAN [KR]
TI - METHOD FOR PROMOTING THE SELF-RENEWAL OF ADULT STEM CELLS USING MESENCHYMAL STROMAL CELLS
AB - The present invention relates to a composition for promoting the self-renewal of adult stem cells, comprising ss-catenin or notch ligand-overexpressed mesenchymal stromal cells. Further, the present invention relates to a method for promoting the self-renewal of adult stem cells by co-culturing adult stem cells with the mesenchymal stromal cells. Furthermore, the present invention relates to ss-catenin or notch ligand-overexpressed mesenchymal stromal cells for promoting the self-renewal of adult stem cells.

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PN - WO2009011139 A1 20090122
PD - 2009-01-22
PA - MITSUBISHI TANABE PHARMA CORP [JP]; YOKOO SEIICHI [JP]; YAMAGAMI SATORU [JP]
IN - YOKOO SEIICHI [JP]; YAMAGAMI SATORU [JP]
TI - METHOD FOR ISOLATION OF CELL, SERUM-FREE CULTURE MEDIUM FOR CELL, AND METHOD FOR CULTURE OF CELL
AB - Disclosed is a method for isolating a cell, particularly a stem cell, which comprises the steps of disaggregating an animal tissue into cells, seeding the cells into a culture vessel having an untreated surface and incubating the cells, and selecting a cell adhered onto the vessel.

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PN - EP2014294 A1 20090114
PD - 2009-01-14
PA - INST NAT SANTE RECH MED [FR]
TI - Use of CD200 as a mesenchymal stem cells marker
AB - The invention relates to methods for phenotyping or isolating mesenchymal stem cells, wherein said method comprises detecting the expression of the marker CD200 at the surface of said cells

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PN - WO2009010841 A2 20090122
PD - 2009-01-22
PA - FOND IRCCS ITITUTO DI RICOVERO [IT]; LAZZARI LORENZA [IT]; MONTEMURRO TIZIANA [IT]; GIORDANO ROSARIA [IT]; REBULLA PAOLO [IT]; SIRCHIA GIROLAMO [IT]
IN - LAZZARI LORENZA [IT]; MONTEMURRO TIZIANA [IT]; GIORDANO ROSARIA [IT]; REBULLA PAOLO [IT]; SIRCHIA GIROLAMO [IT]
TI - CULTURE FOR EXPANDING STEM CELLS EX-VIVO
AB - The present invention relates to a culture including a growth medium and a combination of cytokines consisting of i) interleukin-6 (IL6); ii) flt3-ligand (FLT3); iii) stem cell factor (SCF) and iv) thrombopoietin (TPO); the use of the culture for expanding ex vivo stem cells and/or parental cells and cells differentiated therefrom, and the use of said cells obtainable from said expansion.

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PN - WO2009010725 A2 20090122
PD - 2009-01-22
PA - MEDICAL RES COUNCIL [GB]; CAMBRIDGE ENTPR LTD [GB]; JONES PHILIP HOWLETT [GB]; SIMONS BENJAMIN DAVID [GB]; KLEIN ALLON [GB]
IN - JONES PHILIP HOWLETT [GB]; SIMONS BENJAMIN DAVID [GB]; KLEIN ALLON [GB]
TI - METHODS
AB - The invention relates to a method of detecting an altered behaviour in a population of cells, said method comprising determining at least one of the following characteristics of the population of cells; (i) the proportion of stem cells, proliferating cells and differentiated cells in said cell population; or (ii) the size of stem cell clusters in said cell population; or (iii) the separation of stem cell

clusters in said cell population; and comparing said at least one characteristic to a reference value, wherein a difference between the determined value and the reference value indicates an altered behaviour in said population of cells. Preferably the cells are mammalian, more preferably human epithelial cells, more preferably human epidermal cells.

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PN - WO2009010661 A2 20090122

PD - 2009-01-22

PA - UNIV PARIS DIDEROT PARIS 7 [FR]; CENTRE NAT RECH SCIENT [FR]; DAVID BERTRAND [FR]; PETITE HERVE [FR]; MYRTIL VALENTIN [FR]

IN - DAVID BERTRAND [FR]; PETITE HERVE [FR]; MYRTIL VALENTIN [FR]

TI - REACTOR FOR THE IMPLEMENTATION OF A BONE TISSUE CULTURE

METHOD

AB - The invention relates to a bone tissue culture method. Said method is of the type according to which: particles of a material compatible with the bone tissue are provided; stem cells of bone cells are provided; said particles are seeded with said bone cell stem cells; a nutritional fluid (31) is provided that contains nutritional elements for proliferating the bone cells; said nutritional elements are delivered to said bone cell stem cells via a flow of said nutritional fluid (31); and, according to the invention, said bone cell stem cells are held inside said flow so that said flow exerts mechanical stresses on said cells and so that said bone cells proliferate on said particles (35) to form implantable bone tissue granules. Then said implantable bone tissue granules are recovered in order to transplant them.

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PN - EP2016171 A2 20090121

PD - 2009-01-21

PA - STEMWELL LLC [US]

IN - KLEINBLOESEM CORNELIS H [NL]; GILES PAUL [GB]

TI - STEM CELLS DERIVED FROM BONE MARROW FOR TISSUE REGENERATION

TI - Stem cells derived from bone marrow for tissue regeneration

AB - The invention relates to stems cells derived from bone marrow, and uses thereof in tissue regeneration.

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PN - EP2016099 A1 20090121

PD - 2009-01-21

PA - HOFFMANN LA ROCHE [CH]

IN - LIFKE ALEXANDER [DE]; LIFKE VALERIA [DE]; MUELLER-BECKMANN BERND [DE]; SCHNITZER TOBIAS [DE]

TI - METHOD FOR THE PRODUCTION OF ANTIBODIES IN IMMUNODEFICIENT ANIMAL INJECTED WITH HUMAN FETAL LIVER STEM CELLS

AB - The current invention is related to a method for the production of a human monoclonal antibody from a immunodeficient non-human animal, said method comprising contacting a new borne immunodeficient non-human animal with a human fetal liver stem cell (FL cell) to generate an immune transplanted non-human animal (reconstituted animal), subsequently contacting said reconstituted animal with a antigen, collecting from said reconstituted animal a human cell producing human antibody against said antigen, and isolating said antibody from said antibody producing cell.

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PN - WO2009009739 A2 20090115

PD - 2009-01-15

PA - NEWCO LS10 INC [US]; CHEVALIER BRETT [US]; DEVROE ERIC JAMES [US]; REDDY SASHANK KURAPATI [US]; BERRY DAVID ARTHUR [US]; AFEYAN NOUBAR BOGHOS [US]

IN - CHEVALIER BRETT [US]; DEVROE ERIC JAMES [US]; REDDY SASHANK KURAPATI [US]; BERRY DAVID ARTHUR [US]; AFEYAN NOUBAR BOGHOS [US]

TI - METHODS AND COMPOSITIONS FOR FACILITATING CELL DEATH OF CANCER STEM CELLS AND FOR TREATING CANCER

AB - The invention provides methods and compositions for reducing the number of cancer stem cells in a mixed population of differentiated cells (for example, cancer cells) and cancer stem cells. The cancer stem cells, if present, can be more resistant to traditional drug-based therapies and can provide a source for new, differentiated cancer cells associated with the development of drug-resistance and more aggressive phenotypes. When combined with traditional cancer therapies, for example, drug-based therapies, the methods and compositions of the invention provide a more effective way for treating cancer and can provide a model system for developing new cancer therapies and new treatment modalities.

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PN - WO2009009114 A2 20090115
PD - 2009-01-15
PA - ONCOMED PHARMACEUTICALS INC [US]; SATYAL SANJEEV [US]; HOEY TIMOTHY [US]; DONIGIAN LUCAS [US]
IN - SATYAL SANJEEV [US]; HOEY TIMOTHY [US]; DONIGIAN LUCAS [US]
TI - COMPOSITIONS AND METHODS FOR TREATING AND DIAGNOSING CANCER
AB - The present invention relates to compositions and methods for characterizing, diagnosing, and treating cancer. In particular, the present invention identifies integrin beta (1) as a cancer stem cell marker. In certain embodiments, the present invention provides a method of treating cancer comprising administering a therapeutically effective amount of an integrin beta (1) antibody. In certain embodiments, the integrin beta (1) antibody reduces the frequency of cancer stem cells in a solid tumor.

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PN - WO2009009020 A1 20090115
PD - 2009-01-15
PA - DISCGENICS [US]; KUKEKEOV VALERY [US]; IGANTOVA TATYANA [US]; DUNTSCH CHRISTOPHER [US]
IN - KUKEKEOV VALERY [US]; IGANTOVA TATYANA [US]; DUNTSCH CHRISTOPHER [US]
TI - HUMAN DISC TISSUE
AB - This invention provides an isolated disc stem cell population, compositions, and methods of obtaining and growing the same. Moreover, this invention provides an isolated discosphere, compositions, and methods of obtaining and growing the same. An artificial disc containing the cells of the present invention is provided together with methods of making the same. This invention also provides a method of treating a subject having a herniated disc utilizing the cells and methods of the invention.

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PN - WO2009007979 A2 20090115
PNFP - WO2009007979 A3 20090305
PD - 2009-01-15
PA - TECHNION RES & DEV FOUNDATION [IL]; MACHLUF MARCELLE [IL]; GOREN AMIT [IL]
IN - MACHLUF MARCELLE [IL]; GOREN AMIT [IL]
TI - ENCAPSULATED MESENCHYMAL STEM CELLS AND USES THEREOF
AB - Provided is a composition-of-matter comprising a microcapsule encapsulating mesenchymal stem cells, wherein at least 97 % of cells in said microcapsule are said mesenchymal stem cells. Also provided are methods of generating and using the composition-of-matter.

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PN - WO2009007503 A1 20090115
PD - 2009-01-15
PA - FINNZYMES OY [FI]; SAVILAHTI HARRI [FI]
IN - SAVILAHTI HARRI [FI]
TI - DELIVERY OF NUCLEIC ACIDS INTO GENOMES OF HUMAN STEM CELLS USING IN VITRO ASSEMBLED MU TRANSPOSITION COMPLEXES
AB - The present invention relates to genetic engineering and especially to the use of DNA transposition complex of bacteriophage Mu. In particular, the invention provides a gene transfer

system for isolated human stem cells, wherein in vitro assembled Mu transposition complexes are introduced into a target cell and subsequently transposition into a cellular nucleic acid occurs. The invention further provides a kit for producing insertional mutations into the genomes of isolated human stem cells. The kit can be used, e.g., to generate insertional mutant libraries.

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PN - US2009010896 A1 20090108
PD - 2009-01-08
IN - CENTENO CHRISTOPHER J [US]; KEOHAN CRISTIN [US]
TI - METHODS AND COMPOSITIONS FOR OPTIMIZED EXPANSION AND IMPLANTATION OF MESENCHYMAL STEM CELLS
AB - Compositions and methods are provided for the optimized expansion and implantation of mesenchymal stem cells into a patient in need thereof. Autologous mesenchymal stem cells (MSCs) to a patient in need of MSCs are harvested, expanded within novel growth parameters under the influence of autologous growth factors located on the patient's platelets.

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PN - WO2009005770 A1 20090108
PD - 2009-01-08
PA - TRUSTEES OF THE UNIVERSITY OF [US]; FUNAKI MAKOTO [US]
IN - FUNAKI MAKOTO [US]
TI - LOW RIGIDITY GELS FOR MSC GROWTH MODULATION
AB - This invention provides gels and matrices having a rigidity in the range of 0.1 -2.5 kPa, methods of manufacturing same, and method of preserving a mesenchymal stem cell population or studying mesenchymal stem cells, comprising same.

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PN - WO2009005769 A2 20090108
PD - 2009-01-08
PA - TRUSTEES OF THE UNIVERSITY OF [US]; FUNAKI MAKOTO [US]; JANMEY PAUL A [US]
IN - FUNAKI MAKOTO [US]; JANMEY PAUL A [US]
TI - SOFT GEL SYSTEMS IN MODULATING STEM CELL DEVELOPMENT
AB - This invention provides gels and matrices having a rigidity in the range of 150-750 Pa, methods of manufacturing same, and method of preserving a mesenchymal stem cell population or studying mesenchymal stem cells, comprising same.

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PN - WO2009005155 A1 20090108
PD - 2009-01-08
PA - NAT INST OF ADVANCED IND SCIEN [JP]; STEM CELL SCIENCES KK [JP]; GO MASAHIRO [JP]; TAKENAKA CHIEMI [JP]; OHGUSHI HAJIME [JP]
IN - GO MASAHIRO [JP]; TAKENAKA CHIEMI [JP]; OHGUSHI HAJIME [JP]
TI - METHOD FOR MAINTAINING PROLIFERATION/DIFFERENTIATION ABILITY OF MESENCHYMAL STEM CELL
AB - [PROBLEMS] To develop: a method for maintaining the proliferation/differentiation ability of a mesenchymal stem cell (MSC) derived from a human adult bone marrow: an MSC having a maintained proliferation/differentiation ability; and a method for screening a substance capable of acting on an MSC, for the purpose of maintaining the proliferation/differentiation ability of an MSC, particularly an MSC derived from a human adult bone marrow. [MEANS FOR SOLVING PROBLEMS] Disclosed is a method for maintaining the proliferation/differentiation ability of a mesenchymal stem cell (MSC), particularly an MSC derived from a human adult bone marrow. The proliferation/differentiation ability of an MSC can be maintained by forcibly and stably inducing the gene expression through the introduction of Sox2 or Nanog gene, or by employing the combination of the introduction of Sox2 gene and the addition of bFGF (a growth factor) to a culture medium.

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PN - WO2009004664 A2 20090108
PD - 2009-01-08

PA - UNI DEGLI STUDI DI ROMA TOR VE [IT]; DI NARDO PAOLO [IT]; FORTE
GIANCARLO [IT]; FRANZESE ORNELLA [IT]; BONMASSAR ENZO [IT]; PRAT MARIA [IT]
IN - DI NARDO PAOLO [IT]; FORTE GIANCARLO [IT]; FRANZESE ORNELLA [IT];
BONMASSAR ENZO [IT]; PRAT MARIA [IT]
TI - IMMORTALIZED CELL LINE OF MURINE MESENCHYMAL STEM CELLS,
METHOD FOR PREPARATION AND USES THEREOF
AB - The present invention concerns a new immortalized cell line of mesenchymal murine
stem cells, method for preparation and uses thereof, particularly as an experimental model.

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PN - EP2013334 A2 20090114
PD - 2009-01-14
PA - TSAI RYAN TAO NIEN [US]; TSAI RAY JUI FANG [TW]
IN - TSAI RAY JU-FANG [TW]
TI - METHOD FOR EXPANSION OF HUMAN CORNEAL ENDOTHELIAL CELLS
AB - A method for expanding human corneal endothelial cells includes: (a) providing an
amniotic membrane with or without amniotic cells, wherein the amniotic membrane has an
extracellular matrix; (b) placing onto the amniotic membrane, a sheet of endothelial layer, or a cell
suspension including human corneal endothelial stem cells; and (c) culturing the corneal endothelial
cells on the amniotic membrane for a duration sufficient for the corneal endothelial stem cells to
expand to an appropriate area. The invention also relates to a method for creating a surgical graft for
a recipient site of a patient using the method for expanding human corneal endothelial cells, and the
surgical graft prepared therefrom.

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PN - EP2014316 A1 20090114
PD - 2009-01-14
PA - STEMCELL INST INC [JP]
IN - FUKUI AKIRA [JP]; YOKOO TAKASHI [JP]; OKABE MASATAKA [JP]; HOSOYA
TATSUO [JP]
TI - METHOD OF PREPARING ORGAN FOR TRANSPLANTATION
AB - The present invention provides a method for preparing an organ, particularly a
kidney, for transplantation into mammals. In detail, the present invention provides a method for
preparing autotransplantation of autologous organs, particularly a kidney, wherein the isolated
autologous mesenchymal stem cells are transplanted into an embryo inside a pregnant mammalian
host or into an embryo dissected from a pregnant mammalian host at a desired site to induce
differentiation, which is then transplanted into the individual.

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PN - WO2009002559 A1 20081231
PD - 2008-12-31
PA - HARVARD COLLEGE [US]; CARDOZO DAVID LOPES [US]; JHA RUCHIRA [US]
IN - CARDOZO DAVID L [US]; JHA RUCHIRA [US]
TI - NEURAL STEM CELLS
AB - The invention provides compositions and methods for obtaining neural stem cells
from post-natal subjects and their use in treating neurological disorders.

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PN - WO2008156685 A2 20081224
PD - 2008-12-24
PA - US GOVERNMENT; YOUNG MARIAN F [US]; BI YANMING [US]; SHI SONGTAO
[US]
IN - YOUNG MARIAN F [US]; BI YANMING [US]; SHI SONGTAO [US]
TI - TENDON STEM CELLS
AB - The invention relates to tendon stem cells useful for treating a variety of diseases and
condition, including tendon repair and attachment of tendon to bone. The invention is also directed to
treatment and/or inhibition of bone formation by use of biglycan and/or fibromodulin.

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PN - WO2008156659 A1 20081224

PD - 2008-12-24
PA - CHILDRENS HOSP & RES CT OAK [US]; KUYPERS FRANS A [US]; SERIKOV VLADIMIR B [US]
IN - KUYPERS FRANS A [US]; SERIKOV VLADIMIR B [US]
TI - METHOD OF ISOLATING STEM AND PROGENITOR CELLS FROM PLACENTA
AB - The present invention provides methods of cryopreserving stem and progenitor cells in a mammalian placenta; and methods of obtaining fetal stem and progenitor cells from a cryopreserved mammalian placenta. Cells obtained by carrying out the methods can be used in a variety of therapeutic applications.

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PN - WO2008156629 A2 20081224
PD - 2008-12-24
PA - MASSACHUSETTS INST TECHNOLOGY [US]; GOST JEVA ELENA V [US]; THILLY WILLIAM G [US]
IN - GOST JEVA ELENA V [US]; THILLY WILLIAM G [US]
TI - METHODS AND AGENTS FOR INHIBITING TUMOR GROWTH BY TARGETING THE SSDNA REPLICATION INTERMEDIATE OF TUMOR STEM CELLS
AB - The application is based on the observation that tumor stem cell (TSC) replication involves a replicative intermediate configuration wherein a substantial fraction of the TSC genome is present as single-stranded DNA (ssDNA) when bell-shaped nuclei commence separation into two nuclei. During this replicative intermediate configuration large amounts of ssDNA are thus present in the nuclei of cells which the applicant proposes as target for anti-tumor therapy. A method of screening for anti-tumorigenic agents targeting ssDNA and use of such agents in therapy is claimed.

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PN - WO2008156512 A2 20081224
PD - 2008-12-24
PA - TRUSTEES OF COLUMBIA UNIVERSITY [US]; UNIV NEW YORK [US]; COHEN IRA S [US]; ROSEN AMY B [US]; BRINK PETER R [US]; GAUDETTE GLENN [US]; ROSEN MICHAEL R [US]; ROBINSON RICHARD B [US]
IN - COHEN IRA S [US]; ROSEN AMY B [US]; BRINK PETER R [US]; GAUDETTE GLENN [US]; ROSEN MICHAEL R [US]; ROBINSON RICHARD B [US]
TI - QUANTUM DOT LABELED STEM CELLS FOR USE IN CARDIAC REPAIR
AB - The present invention provides methods and compositions relating to the labeling of target cells with quantum dots (QDs). Specifically, a delivery system is disclosed based on the use of negatively charged QDs for delivery of a tracking fluorescent signal into the cytosol of target cells via a passive endocytosis-mediated delivery process. In a specific embodiment of the invention the target cell is a stem cell, preferably a mesenchymal stem cell (MSC). Such labeled MSCs provide a means for tracking the distribution and fate of MSCs that have been administered to a subject to promote cardiac repair. The invention is based on the discovery that MSCs can be tracked in vitro for up to at least 6 weeks. Additionally, QDs delivered in vivo can be tracked for up to at least 8 weeks, thereby permitting for the first time, the complete 3-D reconstruction of the locations of all MSCs following administration into a host.

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PN - EP2009097 A1 20081231
PD - 2008-12-31
PA - PROCURE THERAPEUTICS LTD [GB]
IN - COLLINS ANNE [GB]
TI - Normal prostate stem cells
AB - We describe a method for the isolation of normal prostate stem cells which express CD133 antigen; stem cells isolated by the method and their use.

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PN - EP2009096 A2 20081231
PD - 2008-12-31
PA - TRANS TECHNOLOGIES LTD [RU]

IN - BUHARTSEV NIKOLAY NIKOLAEVICH [RU]; VIJDE SVETLANA NIKOLAEVNA [RU]; GALANIN IGOR VENIAMINOVICH [RU]; KISLJAKOVA TATYANA VITALJEVNA [RU]; KRUGLAKOV PETER VLADIMIROVICH [RU]; POLYNTSEV DMITRY GENRIHOVICH [RU]; SOKOLOVA IRINA BORISOVNA [RU]; SKOROMETS TARAS ALEKSANDROVICH [RU]

TI - BIOTRANSPLANT FOR CELLULAR THERAPY BASED ON MESENCHYMAL BONE MARROW STEM CELLS

AB - The invention relates to bioengineering and biopharmacology, in particular to obtaining a culture of human mesenchymal bone marrow stem cells used for producing a biotransplant. Said invention can be used in a cellular therapy, in particular for treating patients exhibiting the expressed mental retardation and significant cerebral morphological changes. A homogeneous population of mesenchymal stem cells (MSC) characterised according to cell markers CD 44+, CD 90+, CD105+, CD106+, CD45- AND CD 34- is separated. The homogeneous cells are obtainable at a media interface by centrifuging a heparanized bone marrow and are passed, not more than three times, on mattresses for producing a cell biomass. The thus obtained cell population is used for producing a biotransplant. The biotransplant based on the patient's own MSC in the 10% autoserum of the blood thereof is used for treating intellectually-mnestic diseases of different aetiology and for treating the pathological changes of cerebral tissue relating to a head and brain injury or to acute changes of cerebral circulation. The treatment is carried out by the parenchymatous or intravascular injection of a therapeutically effective amount of the biotransplant. Said invention makes it possible to obtain the biotransplant based on the homogeneous according to genetic markers cells without additional costs and as soon as possible.

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PN - EP2007882 A1 20081231

PD - 2008-12-31

PA - AGRONOMIQUE INST NAT RECH [FR]; CENTRE NAT RECH SCIENT [FR]; ENS ECOLE NORMALE SUPERIEURE D [FR]

IN - PAIN BERTRAND [FR]; LAVIAL FABRICE [FR]; SAMARUT JACQUES [FR]

TI - METHOD FOR PREPARING DIFFERENTIATED AVIAN CELLS AND GENES INVOLVED IN MAINTAINING PLURIPOTENCY

AB - The present invention relates to a method for preparing differentiated avian cells from stem cells in culture. Genes involved in maintaining the pluripotency of avian stem cells were identified and cloned. By inhibiting the expression of these genes in stem cells, the latter lose their pluripotency characteristics and enter into differentiation. These differentiated cells obtained in vitro can serve as host cells for pathogens, in particular viruses, and can thus be used for the production of antiviral vaccines.

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PN - EP2007411 A2 20081231

PD - 2008-12-31

PA - KWALATA TRADING LTD [CY]

IN - PORAT YAEL [IL]; FULGA VALENTIN [IL]; POROZOV SVETLANA [IL]; BELLELI ADINA [IL]

TI - REGULATING STEM CELLS

AB - A composition of matter is provided, comprising a population of cultured cells that comprises a sub-population of cells that both stain as CD31Bright and demonstrate uptake of Ac-LDL+, and secrete IL-8. A method is also provided, comprising stimulating in vitro an initiating cell population (ICP) of at least 5 million cells that have a density of less than 1.072 g/ml, wherein at least 1% of the cells of the ICP is CD34+CD45-/Dim, and at least 25% of the cells of the ICP are CD31Bright, to differentiate into a progenitor/precursor cell population (PCP). Other embodiments are also described.

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PN - EP2006374 A2 20081224

PD - 2008-12-24

PA - APOGENIX GMBH [DE]

IN - STASSI GIORGIO [IT]; TODARO MATILDE [IT]

TI - Method for the purification and amplification of tumoral stem cells

AB - The invention concerns a method for the purification and amplification in the undifferentiated state of tumoral stem cells from solid tumours which are most resistant to conventional therapies, aiming at devising new tumour markers and therapeutic targets both for early diagnosis and for targeted therapeutic strategies.

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PN - EP2004212 A1 20081224
PD - 2008-12-24
PA - STEM CELL THERAPEUTICS CORP [CA]
IN - WEISS SAMUEL [CA]; GREGG CHRISTOPHER [CA]; DAVIDOFF ALLEN [CA]; TUCKER JOSEPH [CA]
TI - CONTINUOUS DOSING REGIMENS FOR NEURAL STEM CELL PROLIFERATING AGENTS AND NEURAL STEM CELL DIFFERENTIATING AGENTS
Dosing regimes for neural stem cell proliferating agents in combination with neural stem cell differentiating agents, kits containing effective doses of neural stem cell proliferating agents and differentiating agents, and uses thereof in treating or ameliorating neurodegenerative diseases and conditions are disclosed. In particular, neural stem cell proliferating agent human chorionic gonadotropin (hCG) or luteinizing hormone (LH), administered systemically in several doses per day, is used in combination with neural stem cell differentiating agent erythropoietin (EPO).

EMBRYONIC STEM CELLS – 26 Documents

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PN - EP2028268 A1 20090225
PD - 2009-02-25
PA - UNIV BRUXELLES [BE]
IN - VANDERHAEGEN PIERRE [BE]; GASPARD NICOLAS [BE]; NAEIJE GILLES [BE]; VAN DEN AMEELE JELLE [BE]; DEVREKER FABIENNE [BE]; ENGLERT YVON [BE]
TI - Generation of neuronal cells from pluripotent stem cells
AB - The invention relates to in vitro methods for differentiating mammalian pluripotent stem cells into cells displaying a neuronal phenotype, more particularly into cortical-type neurons including inter alia pyramidal neurons and cortical inhibitory interneurons. The invention further encompasses so-obtained neuronal cells and cell population, compositions comprising such, and further uses of said neuronal cells and cell population.

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PN - GB2452186 A 20090225
PD - 2009-02-25
PA - WISCONSIN ALUMNI RES FOUND [US]
IN - ODORICO JON [US]; XU XIAOFANG [US]
TI - Method of differentiating stem cells into cells of the endoderm and pancreatic lineage
AB - The invention relates to compositions and methods for treating patients with Demyelinating Diseases and Conditions including Multiple Sclerosis, Spinal Cord Injury, Traumatic Brain Injury and Stroke. The compositions and methods may also be used for Stroke Rehabilitation and the treatment of pain disorders including Neuropathic Pain and Chemokine-Induced Pain. The compositions comprise one or more pyridazine compounds having a pyridazinyl radical pendant with an aryl or substituted aryl, a heteroaryl or substituted heteroaryl.

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PN - EP2024492 A2 20090218
PD - 2009-02-18
PA - GERON CORP [US]; ROSLIN INST [GB]
IN - ZHAO DEBIAO [GB]; MAJUMDAR ANISH SEN [US]; HAY DAVID [GB]; CUI WEI [GB]
TI - DIFFERENTIATION OF PRIMATE PLURIPOTENT CELLS TO HEPATOCYTE-LINEAGE CELLS

AB - Methods for differentiating primate pluripotent stem cells into hepatocyte-lineage cells are provided. In certain embodiments, the methods utilize sequential culturing of the primate pluripotent stem cells in certain growth factors to produce hepatocyte-lineage cells. In certain embodiments, the population of cells produced by the methods is further enriched for hepatocyte-lineage cells.

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PN - WO2009020632 A1 20090212
PD - 2009-02-12
PA - BURNHAM INST FOR MEDICAL RES [US]; SNYDER EVAN Y [US]; GONZALEZ RODOLFO [US]
IN - SNYDER EVAN Y [US]; GONZALEZ RODOLFO [US]
TI - ZNF206: A NOVEL REGULATOR OF EMBRYONIC STEM CELL SELF-RENEWAL AND PLURIPOTENCY
AB - We have identified ZNF206, a novel repressor of human embryonic stem cell (hESC) differentiation. Repressing extra-embryonic endoderm development preserves the pluripotent state of human embryonic stem cells, and, conversely downregulating expression of ZNF206 in hESCs causes them to upregulate the expression of genes associated with the extra-embryonic endodermal lineage, down-regulate genes associated with the pluripotent state, and may lead to the further emergence of genes associated with even more differentiated lineages and phenotypes.

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PN - EP2022847 A1 20090211
PD - 2009-02-11
PA - VIRANT-KLUN IRMA [SI]
IN - VIRANT-KLUN IRMA [SI]
TI - Pluripotent stem cells, methods for their isolation and their use and culture media
AB - Pluripotent stem cells can be obtained from follicular fluid. Methods for obtaining pluripotent stem cells and their use as well as culture media are described.

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PN - EP2021462 A2 20090211
PD - 2009-02-11
PA - LIFESCAN INC [US]
IN - REZANIA ALIREZA [US]; XU JEAN [US]
TI - DIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS
AB - The present invention provides methods to promote the differentiation of pluripotent stem cells. In particular, the present invention provides an improved method for the formation of pancreatic endoderm, pancreatic hormone expressing cells and pancreatic hormone secreting cells. The present invention also provides methods to promote the differentiation of pluripotent stem cells without the use of a feeder cell layer.

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PN - EP2021464 A1 20090211
PD - 2009-02-11
PA - CHABIOTECH CO LTD [KR]; COLLEGE OF MEDICINE POCHON CHA [KR]
IN - CHUNG HYUNG-MIN [KR]; LEE SOO-HONG [KR]; KIM SI-NAE [KR]; KIM MIN-JEONG [KR]
TI - METHOD FOR CULTURING HUMAN EMBRYONIC STEM CELLS
AB - The present invention relates to a method for culturing human embryonic stem cells (hESCs) in a hESC culture medium comprising a porous membrane, feeder cells being attached to a bottom of the porous membrane and a method for recovering human embryonic stem cells using the same.

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PN - WO2009018587 A2 20090205
PD - 2009-02-05
PA - UNIV LELAND STANFORD JUNIOR [US]; DAADI MARCEL M [US]; STEINBERG GARY K [US]

IN - DAADI MARCEL M [US]; STEINBERG GARY K [US]
TI - DERIVATION OF NEURAL STEM CELLS FROM EMBRYONIC STEM CELLS AND METHODS OF USE THEREOF
AB - Provided is a method for the derivation of neural stem cells (NSCs) from embryonic stem cells (ESCs) and the use of the NSCs for treatment of various neural disorders. The NSCs that are derived from the ESCs are tissue-specific multipotent NSCs with a stable growth rate, unlimited self-renewal capacity, and a predictable differentiation profile. Being both non-tumorigenic and engraftable, the NSCs of the present invention have utility in repopulation stroke-damaged tissue. The NSCs of the present invention may be differentiated to produce tyrosine-hydroxylase expressing neurons, which may be used as a source of dopaminergic neurons for subjects suffering from a condition characterized by dopaminergic dysfunction, such as Parkinson's disease.

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PN - WO2009018453 A1 20090205
PD - 2009-02-05
PA - LIFESCAN INC [US]; XU JEAN [US]
IN - XU JEAN [US]
TI - DIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS
AB - The present invention provides methods to promote the differentiation of pluripotent stem cells. In particular, the present invention provides an improved method for the formation of pancreatic endoderm, pancreatic hormone expressing cells and pancreatic hormone secreting cells. The present invention also provides methods to promote the differentiation of pluripotent stem cells without the use of a feeder cell layer.

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PN - WO2009017460 A1 20090205
PD - 2009-02-05
PA - ES CELL INT PTE LTD [SG]; RUST WILLIAM L [SG]; BALAKRISHNAN THAVAMALAR [SG]
IN - RUST WILLIAM L [SG]; BALAKRISHNAN THAVAMALAR [SG]
TI - METHOD FOR IDENTIFYING AND SELECTING CARDIOMYOCYTES
AB - The present invention relates to new and/or improved methods of identification and selection of cardiomyocytes from human embryonic stem (hES) cells. The method further comprises isolating the selected cardiomyocyte population. There is also provided method for the screening for cardiovascular compounds comprising subjecting the said cardiomyocyte population to test compound/s, and observing and/or interpreting a response of the cardiomyocytes to the test compound.

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PN - WO2009017269 A1 20090205
PD - 2009-02-05
PA - KOREA RES INST OF BIOSCIENCE [KR]; CHO YEE SOOK [KR]; LEE KYU-WON [KR]
IN - CHO YEE SOOK [KR]; LEE KYU-WON [KR]
TI - A METHOD FOR DIFFERENTIATING OF HUMAN EMBRYONIC STEM CELLS INTO THE OSTEOBLASTIC LINEAGE
AB - Disclosed are a composition for introducing the osteogenic differentiation of human embryonic stem cells and a method for differentiating human embryonic stem cells into an osteoblastic lineage by inhibiting the mTOR signaling pathway. When cultured in the presence of an inhibitor of the mTOR signaling pathway, human embryonic stem cells are effectively induced to differentiate into an osteoblastic lineage. The osteogenic differentiation of human embryonic stem cells using the method and the composition is useful in examining the development and differentiation mechanism of osteoblasts and the cause of metabolic bone diseases, including osteoporosis. In addition, the method and the composition can be applied to the development of osteogenic differentiation techniques for generating clinically useful, terminally differentiated mature cells or progenitor cells.

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PN - WO2009016078 A2 20090205

PD - 2009-02-05
PA - INST NAT SANTE RECH MED [FR]; CAILLERET MICHEL [FR]; COME JULIEN [FR]; PESCHANSKI MARC [FR]
IN - CAILLERET MICHEL [FR]; COME JULIEN [FR]; PESCHANSKI MARC [FR]
TI - METHOD FOR CULTURING MAMMALIAN STEM CELLS
AB - The invention relates to a method for culturing mammalian stem cells, in particular embryonic stem cells comprising the following steps: a) providing a perfused bioreactor (1) comprising a cell culture chamber (2); b) placing said mammalian stem cells within said culture chamber (2); c) providing a perfusion loop which provides fresh medium to said perfused bioreactor and removes used medium from said perfused bioreactor; d) providing a dialysis loop which comprises a reservoir of medium (3) and dialysis chamber (4); wherein the dialysis loop provides fresh medium to the perfusion loop through the dialysis chamber (4). The invention also relates to a device for culturing mammalian stem cells according to the invention.

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PN - GB2451523 A 20090204
PD - 2009-02-04
PA - UNIV EDINBURGH [GB]
IN - YING QI-LONG [US]; SMITH AUSTIN GERARD [GB]
TI - Pluripotent cells from rat and other species
AB - Pluripotent cells are derived and maintained in a self-renewing state in serum-free culture medium comprising a MEK inhibitor, a GSK3 inhibitor and an antagonist of an FGF receptor.

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PN - WO2009015036 A1 20090129
PD - 2009-01-29
PA - UNIV OREGON HEALTH & SCIENCE [US]; MITALIPOV SHOUKHART M [US]
IN - MITALIPOV SHOUKHART M [US]
TI - PARTHENOTE-DERIVED STEM CELLS AND METHODS OF MAKING AND USING THEM
AB - Primate parthenotes, cells derived from them, and libraries of such cells are disclosed. Additionally, methods are disclosed for making primate parthenotes, the production of embryonic cells from these parthenotes, and for differentiating the parthenotes into desired cell types, including multi-potent and differentiated cells. Methods are also provided for treating diseases or conditions for which the desired cell types are beneficial. Methods to identify agents of interest using these cells are also described.

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PN - WO2009014340 A2 20090129
PD - 2009-01-29
PA - COLLEGE OF MEDICINE POCHON CHA [KR]; LEE SOO-HONG [KR]; AHN SEONG-EUN [KR]; LEE DAE-HEE [KR]
IN - LEE SOO-HONG [KR]; AHN SEONG-EUN [KR]; LEE DAE-HEE [KR]
TI - PROCESS FOR DIFFERENTIATING EMBRYONIC STEM CELLS USING POROUS MEMBRANE
AB - The present invention provides a process for differentiating embryonic stem cells by co-culturing embryonic stem cells or an embryoid body derived from embryonic stem cells in a differentiation culture medium comprising feeder cells, wherein the culture medium comprises a porous membrane having the feeder cells attached to a bottom of the porous membrane, and the embryonic stem cells or embryoid body are co-cultured on the porous membrane; and a process for recovering cells differentiated from embryonic stem cells using the same.

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PN - WO2009013254 A1 20090129
PD - 2009-01-29
PA - CELLARTIS AB [SE]; HEINS NICO [SE]; BROLEN GABRIELLA [SE]; KUEPPERS-MUNThER BARBARA [SE]
IN - HEINS NICO [SE]; BROLEN GABRIELLA [SE]; KUEPPERS-MUNThER BARBARA [SE]

TI - A NOVEL POPULATION OF HEPATOCYTES DERIVED VIA DEFINITIVE ENDODERM (DE-HEP) FROM HUMAN BLASTOCYSTS STEM CELLS
AB - The present invention relates to a novel hepatocyte-like cell progenitor and/or a novel hepatocyte-like cell derived via definitive endoderm from human blastocyst-derived stem (hBS) cells, to a method for the preparation of such cells and to the potential use of such cells in e.g. pharmaceutical drug discovery and development, toxicity testing, cell therapy and medical treatment. In particular is presented a definitive endoderm derived hepatocyte-like cell with important liver-expressed marker genes and important metabolizing enzymes, as well as drug transporters.

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PN - WO2009012428 A2 20090122
PD - 2009-01-22
PA - LIFESCAN INC [US]; REZANIA ALERIZA [US]
IN - REZANIA ALERIZA [US]
TI - DIFFERENTIATION OF HUMAN EMBRYONIC STEM CELLS
AB - The present invention provides methods to promote the differentiation of pluripotent stem cells. In particular, the present invention provides an improved method for the formation of pancreatic endoderm, pancreatic hormone expressing cells and pancreatic hormone secreting cells. The present invention also provides methods to promote the differentiation of pluripotent stem cells without the use of a feeder cell layer.

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PN - WO2009011663 A1 20090122
PD - 2009-01-22
PA - AGENCY SCIENCE TECH & RES [SG]; SCHUMACHER KARL M [SG]; YING JACKIE Y [SG]; SCHUMACHER ANNEGRET [SG]; NARAYANAN KARTHIKEYAN [SG]; MAUBACH GUNTER [SG]
IN - SCHUMACHER KARL M [SG]; YING JACKIE Y [SG]; SCHUMACHER ANNEGRET [SG]; NARAYANAN KARTHIKEYAN [SG]; MAUBACH GUNTER [SG]
TI - METHOD FOR DIFFERENTIATING EMBRYONIC STEM CELLS INTO CELLS EXPRESSING AQP-1
AB - The present invention relates to methods of differentiating a human embryonic stem (ES) cell into a cell, specifically a renal epithelial cell, expressing AQP-1. The methods disclosed comprise culturing human ES cells in a renal specific medium in the presence of an extracellular matrix molecule. The cells produced according to said method can be used to treat renal related disorders such as renal failure, nephrosis, Bright's disease and glomerulitis.

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PN - WO2009008928 A2 20090115
PD - 2009-01-15
PA - STEMNION INC [US]; SING GEORGE L [US]; MARSHALL VIVIENNE S [US]; CLARKE DIANA L [US]
IN - SING GEORGE L [US]; MARSHALL VIVIENNE S [US]; CLARKE DIANA L [US]
TI - METHODS FOR TREATING NERVOUS SYSTEM INJURY AND DISEASE
AB - The invention is directed to methods for treating nervous system injury and disease, in particular traumatic brain injury and degenerative nervous system disease. Such methods utilize novel compositions, including but not limited to trophic factor-secreting extraembryonic cells (herein referred to as TSE cells), including, but not limited to, amnion-derived multipotent progenitor cells (herein referred to as AMP cells) and conditioned media derived therefrom (herein referred to as amnion-derived cellular cytokine solution or ACCS), each alone or in combination with each other and/or other agents.

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PN - WO2009006422 A1 20090108
PD - 2009-01-08
PA - STEM CELL PRODUCTS INC [US]; BEARDSLEY NATHANIEL [US]; BERGENDAHL VEIT [US]; FITZGERALD MEGAN [US]; DAIGH CHRISTINE [US]
IN - BEARDSLEY NATHANIEL [US]; BERGENDAHL VEIT [US]; FITZGERALD MEGAN [US]; DAIGH CHRISTINE [US]

TI - AUTOMATED METHOD AND APPARATUS FOR EMBRYONIC STEM CELL CULTURE

AB - The invention concerns methods for automated culture of embryonic stem cells (ESCs) such as human ESCs. In some aspects, methods of the invention employ optimized culture media and limited proteolytic treatment of cells to separate cell clusters for expansion. Automated systems for passage and expansion of ESCs are also provided.

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PN - WO2009006399 A1 20090108

PD - 2009-01-08

PA - LIFESCAN INC [US]; NELSON SHELLEY [US]

IN - NELSON SHELLEY [US]

TI - SINGLE PLURIPOTENT STEM CELL CULTURE

AB - The present invention relates to the field of pluripotent stem cell culture and methods facilitate pluripotent stem cell culture at industrial levels.

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PN - GB2451042 A 20090114

PD - 2009-01-14

PA - WISCONSIN ALUMNI RES FOUND [US]

IN - CEZAR GABRIELA G [US]

TI - Reagents and methods for using human embryonic stem cells to evaluate toxicity of pharmaceutical compounds and other chemicals

AB - The invention provides biomarker profiles of cellular metabolites and methods for screening chemical compounds including pharmaceutical agents, lead and candidate drug compounds and other chemicals using human embryonic stem cells (hESC) or lineage-specific cells produced therefrom. The inventive methods are useful for testing toxicity, particularly developmental toxicity and detecting teratogenic effects of such chemical compounds.

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PN - WO2009002223 A1 20081231

PD - 2008-12-31

PA - TEPLYASHIN ALEXANDER SERGEEVICH [RU]; SINGINA GALINA NIKOLAEVNA [RU]; CHUPIKOVA NATALIYA IGOREVNA [RU]; SHARIFULLINA SVETLANA ZAGIROVNA [RU]

IN - TEPLYASHIN ALEXANDER SERGEEVICH [RU]; SINGINA GALINA NIKOLAEVNA [RU]; CHUPIKOVA NATALIYA IGOREVNA [RU]; SHARIFULLINA SVETLANA ZAGIROVNA [RU]

TI - METHOD FOR PRODUCING A HUMAN HYBRID STEM CELL

AB - The invention relates to cell engineering and can be used for producing a human hybrid stem cell. The inventive method consists in producing a hybrid stem cell by carrying out the inter-species transplantation of a human somatic cell into an enucleated oocyte, wherein a mesenchyme stem cell is used as a donor somatic cell and a pig oocyte is used as an oocyte. The human hybrid stem cell produced by transplanting the nucleus of a human mesenchyme stem cell into the enucleated pig oocyte is also disclosed. Said invention makes it possible to develop a method for producing human hybrid stem cells, the genetic set of which is identical to the set of a patient and the use of which in restorative therapy excludes the probability of immune incompatibility.

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PN - WO2008156708 A2 20081224

PD - 2008-12-24

PA - MASSACHUSETTS INST TECHNOLOGY [US]; COLTON CLARK K [US]; POWERS DARYL E [US]; MILLMAN JEFFREY R [US]

IN - COLTON CLARK K [US]; POWERS DARYL E [US]; MILLMAN JEFFREY R [US]

TI - METHODS AND COMPOSITIONS FOR ENHANCED DIFFERENTIATION FROM EMBRYONIC STEM CELLS

AB - The invention provides methods for differentiating pluripotent stem cells such as ES cells with improved progenitor and differentiated cell yield using low oxygen conditions and optionally in the absence of exogenously added differentiation factors.

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PN - GB2450599 A 20081231
PD - 2008-12-31
PA - STEM CELL SCIENCES [GB]
IN - KERBY JULIE [GB]; THOMPSON HAZEL [GB]
TI - Automated culture of stem cells
AB - Methods are provided for large-scale automated production of stem cells, including embryonic stem cells, and differentiated cells derived from stem cells in culture. Also provided are populations of stem cells or differentiated cells and apparatus adapted for the large-scale production of stem cells or the differentiated progeny thereof.

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PN - EP2007881 A2 20081231
PD - 2008-12-31
PA - UNIV RICE WILLIAM M [US]
IN - ATHANASIOU KYRIACOS A [US]; HOBEN GWENDOLYN [US]; KOAY EUGENE J [US]; HU JERRY [US]
TI - TISSUE ENGINEERING WITH HUMAN EMBRYONIC STEM CELLS
AB - Methods for forming tissue engineered constructs without the use of scaffolds and associated methods of use in tissue replacement are provided. One example of a method may comprise providing a shaped hydrogel negative mold; seeding the mold with cells; allowing the cells to self-assemble in the mold to form a tissue engineered construct.

INDUCED EMBRYONIC STEM CELLS/ DEDIFFERENTIATION OF CELLS – 3 documents

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PN - WO2009023161 A1 20090219
PD - 2009-02-19
PA - UNIV DAYTON [US]; HONG YILING [US]
IN - HONG YILING [US]
TI - METHODS OF PRODUCING PLURIPOTENT STEM-LIKE CELLS
AB - The instant invention provides methods and compositions for the production and use of pluripotent stem-like cells from somatic cells, e.g., fibroblasts. The somatic cells are cultured in the presence of arachidonic acid and serum albumin and optionally other cell factors and molecules to enable the somatic cells to dedifferentiate into stem-like cells.

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PN - GB2450603 A 20081231
PD - 2008-12-31
PA - BAYER SCHERING PHARMA AG [DE]
IN - SAKURADA KAZUHIRO [JP]; MASAKI HIDEKI [JP]; ISHIKAWA TETSUYA [JP]
TI - Human pluripotent stem cells produced by the introduction of Oct3/4, Sox2, and Klf4 genes, along with a c-Myc gene or histone deacetylase inhibitor, into post
AB - Human pluripotent stem cells are disclosed which are established from human postnatal tissue through the introduction of Oct3/4, Sox2, and Klf4 genes, or Oct3/4, Sox2, and Klf4 genes in combination with either a c-Myc gene or a histone deacetylase inhibitor. Methods of inducing human pluripotent stem cells of the invention from an undifferentiated stem cell in human postnatal tissue are also claimed, as are stem cells of the invention for use in cell replacement therapy. Undifferentiated stem cells in which each of the genes Tert, Nanog, Oct3/4, and Sox2 has not undergone epigenetic inactivation, and which can be induced into the pluripotent stem cells of the invention, are also claimed.

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PN - EP2014766 A1 20090114
PD - 2009-01-14
PA - ASUBIO PHARMA CO LTD [JP]

IN - KOSHIMIZU UICHI [JP]; TANAKA TOMOFUMI [JP]; KAWASHIMA KAYOKO [JP]; KADOKURA MICHINORI [JP]

TI - METHOD FOR DIFFERENTIATION INDUCTION OF MYOCARDIAL CELL FROM PLURIPOTENT STEM CELL

AB - The present invention provides a method for inducing differentiation of cardiomyocytes efficiently and selectively from stem cells. A method for inducing differentiation of cardiomyocytes from pluripotent stem cells, which comprises: (i) culturing the pluripotent stem cells in a culture medium containing no substance that promotes activation of the canonical Wnt signaling pathway during the time period between initiation of differentiation induction and 24 hours before the period of elevated canonical Wnt gene expression; and then (ii) culturing the pluripotent stem cells in a culture medium containing a substance that promotes activation of the canonical Wnt signaling pathway during a time period of 24 to 96 hours, starting from 24 to 0 hours before the period of elevated canonical Wnt gene expression.

GRANTED PATENTS- PUBLISHED "B" SPECS

ADULT STEM CELLS- 18 DOCUMENTS

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GRANTED- 13-01-2009

PNFP - **US7476540** B2 20090113

PA -

SEOUL NAT UNIV IND FOUNDATION [KR]

IN - SONG YEONG-WOOK [KR]; YOO HYUN-JUNG [KR]; YOON SUNG-SOO [KR]; PARK SEONYANG [KR]; PARK WEON-SEO [KR]; KIM DONG-JŌ [KR]; LEE EUN-BONG [KR]

TI - Monoclonal antibodies to mesenchymal stem cells

AB - The present invention relates to monoclonal antibodies specifically binding to a membrane antigen of human mesenchymal stem cells, hybridoma cell lines producing the same, and methods for identifying or isolating human mesenchymal stem cells using the same. The monoclonal antibodies of this invention exhibit excellent specificity to human mesenchymal stem cells, inter alia, bone marrow-derived human mesenchymal stem cells, so that it allows for the identification and isolation of human mesenchymal stem cells with much higher specificity.

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GRANTED- 17-02-2009

PNFP - **US7491866** B2 20090217

IN - HAMMER ROBERT E [US]; HAMRA FRANKLIN K [US]; CRONKHITE JENNIFER T [US]

TI - TRANSGENIC RATS AND SPERMATOGONIAL STEM CELLS

AB - A transgenic rat expresses a gene of interest, such as EGFP, exclusively in the germ cells of both males and females. From such a transgenic rat one can isolate a line of spermatogonial stem cells, which can renew and proliferate in culture.

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GRANTED- 31-12-2008

PNFP - **EP1748066** B1 20081231

PA - STIFTUNG CAESAR [DE]; SIEMONSMEIER JUERGEN DR [DE]; UNIV BONN [DE]

IN - SIEMONSMEIER JUERGEN DR DR [DE]; DEGISTIRICI OEZER DR [DE]; THIE MICHAEL DR [DE]; GOETZ WERNER PROF DR [DE]

TI - Method for isolating stem cells from a pad-like tissue of teeth

AB - The invention relates to a method for isolating non-embryonic stem cells from a tissue that is located in immediate vicinity of immature, developing teeth or wisdom teeth. The invention further relates to non-embryonic stem cells derived from said tissue. The method according to the

invention utilises a living soft tissue residing underneath the dental papilla 12 in immediate vicinity of the apical side of a developing tooth, which is clearly distinguished from other tooth tissue, such as dental papilla 12 or follicle. The pad-like tissue 16 can only be detected in a defined, specific developmental stage in an early phase of root formation. That is, identifying and separating the pad-like tissue 16 is only possible from the appearance of the bony alveolar fundus to the end of the formation of the root of the tooth.

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GRANTED- 25-02-2009

PNFP - **EP1658855** B1 20090225

PA - KOREA INST OF RADIOLOGICAL & M [KR]; CHUNG AUG UNIVERSITY

INDUSTRY [KR]

IN - SON YOUNG SOOK [KR]; HONG HYUN SOOK [KR]; KIM JAE CHAN [KR]

TI - Use of substance p for mobilization or proliferation of mesenchymal stem cells and for wound healing

AB - The present invention relates to a use of Substance-P for the manufacture of a medicament for mobilization or proliferation of Mesenchymal stem cells (MSCs) from the bone marrow, or facilitating said mobilization or proliferation, and use of Substance-P for the manufacture of a medicament for wound-healing or facilitating wound-healing.

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GRANTED- 13-01-2009

PNFP - **US7476538** B2 20090113

PA - CENTRE NAT RECH SCIENT [FR]; OREAL [FR]

IN - HATZFELD JACQUES [FR]; FORTUNEL NICOLAS [FR]; HATZFELD ANTOINETTE [FR]

TI - Method for enhancing keratinocyte stem cells

AB - The enrichment of a population of keratinocyte stem cells (KSCs) from a preparation of keratinocytes and KSCs, includes pre-enrichment by contacting a sample of keratinocytes and KSCs with a collagen-coated culture plate for a sufficient time for KSCs to adhere, followed by washing away the non-adherent cells and recovering the adherent cells. The recovered adherent cells are sorted by their expression level of EGFR so that cells are recovered that have an expression level of EGFR of less than about 50% of the maximum level of EGFR expression, and the recovered cells have an expansion potential of at least 109 after about 100 days in culture.

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GRANTED- 23-12-2008

PNFP - **US7468276** B2 20081223

PA - ANTHROGENESIS CORP [US]

IN - HARIRI ROBERT J [US]

TI - Placental stem cells

AB - The present invention provides a method of extracting and recovering embryonic-like stem cells, including, but not limited to pluripotent or multipotent stem cells, from an exsanguinated human placenta. A placenta is treated to remove residual umbilical cord blood by perfusing an exsanguinated placenta, preferably with an anticoagulant solution, to flush out residual cells. The residual cells and perfusion liquid from the exsanguinated placenta are collected, and the embryonic-like stem cells are separated from the residual cells and perfusion liquid. The invention also provides a method of utilizing the isolated and perfused placenta as a bioreactor in which to propagate endogenous cells, including, but not limited to, embryonic-like stem cells. The invention also provides methods for propagation of exogenous cells in a placental bioreactor and collecting the propagated exogenous cells and bioactive molecules therefrom.

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GRANTED- 30-12-2008

PNFP - **US7470537** B2 20081230

IN - HEDRICK MARC H [US]; KATZ ADAM J [US]; LLULL RAMON [ES]; FUTRELL J

WILLIAM [US]; BENHAIM PROSPER [US]; LORENZ HERMANN PETER [US]; ZHU MIN [US]

TI - Adipose-derived stem cells and lattices

AB - The present invention provides adipose-derived stem cells (ADSCs), adipose-derived stem cell-enriched fractions (ADSC-EF) and adipose-derived lattices, alone and combined with the ADSCs of the invention. In one aspect, the present invention provides an ADSC substantially free of adipocytes and red blood cells and clonal populations of connective tissue stem cells. The ADSCs can be employed, alone or within biologically-compatible compositions, to generate differentiated tissues and structures, both in vivo and in vitro. Additionally, the ADSCs can be expanded and cultured to produce molecules such as hormones, and to provide conditioned culture media for supporting the growth and expansion of other cell populations. In another aspect, the present invention provides an adipose-derived lattice substantially devoid of cells, which includes extracellular matrix material from adipose tissue. The lattice can be used as a substrate to facilitate the growth and differentiation of cells, whether in vivo or in vitro, into anlagen or even mature tissues or structures.

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GRANTED- 21-01-2009

PNFP - **EP1570052** B1 20090121

PA - ANGES MG INC [JP]

IN - KOKUZAWA JOUJI [JP]; YOSHIMURA SHINICHI [JP]; KITAJIMA HIDEOMI [JP];

SHINODA JUN [JP]; KAKU YASUHIKO [JP]; IWAMA TORU [JP]; MORISHITA RYUICHI [JP];

KUNISADA TAKAHIRO [JP]; SAKAI NOBORU [JP]

TI - METHOD FOR CULTURING NEURAL STEM CELLS USING HEPATOCYTE GROWTH FACTOR

AB - A medium containing hepatocyte growth factor (HGF) was shown to induce neurosphere formation. Furthermore, the addition of HGF to a culture medium containing FGF-2, EGF, or both increased both the size and number of newly formed neurospheres. Thus, the present invention relates to a growth medium comprising HGF for culturing neural stem cells and methods for culturing the cells using the culture medium.

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GRANTED- 03-02-2009

PNFP - **US7485460** B2 20090203

PA - TULANE UNIVERSITY HEALTH SCIEN [US]

IN - PROCKOP DARWIN [US]; SEKIYA ICHIRO [JP]; GREGORY CARL [US]; SPEES

JEFFREY [US]; SMITH JASON [US]; POCHAMPALLY RADHIKA [US]

TI - Enhanced growth of adult stem cells with Dkk-1

AB - The present invention encompasses methods and compositions for enhancing the growth of adult marrow stromal cells.

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GRANTED- 25-02-2009

PNFP - **EP1459758** B1 20090225

PA - ASUBIO PHARMA CO LTD [JP]

IN - MIURA KENJU [JP]; HARUYAMA MUNETADA [JP]; KODAMA SHIHO [JP]

TI - COFILIN FOR PROMOTING THE PROLIFERATION AND/OR DIFFERENTIATION OF HEMATOPOIETIC STEM CELLS AND/OR HEMATOPOIETIC PRECURSOR CELLS

AB - This invention has as its object providing promoters of the growth and/or differentiation of hematopoietic stem cells and/or hematopoietic progenitors which are useful as therapeutics of diseases that result from insufficient growth and/or differentiation of hematopoietic stem cells and/or hematopoietic progenitors, in particular, as therapeutics of panhematopenia and/or diseases that are accompanied by hematopoietic hypofunction. The invention attains the stated object by providing promoters of the growth and/or differentiation of hematopoietic stem cells and/or hematopoietic progenitors that contain Cofilin as an active ingredient. <IMAGE>

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GRANTED- 28-01-2009

PNFP - **EP1391505** B1 20090128

PA - AJINOMOTO KK [JP]

IN - TANIGUCHI HIDEKI [JP]; SUZUKI ATSUSHI [JP]

TI - STEM CELLS AND METHOD OF SEPARATING THE SAME

AB - The present invention provides a method of separating a pancreatic stem cell from the pancreas of a mammal, a method of identifying a pancreatic stem cell of a mammal, and use of a pancreatic stem cell that can be separated or identified by this method. More particularly, the present invention provides a method of separating or identifying a pancreatic stem cell of a mammal, which includes analyzing the state of expression of 2 or more marker proteins selected from the group consisting of c-Met, c-Kit, CD45, TER119 and Flk-1, or a gene encoding the marker protein.

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GRANTED- 07-01-2009

PNFP - **EP1425297** B1 20090107

PA - CHILDREN S HOSPITAL OF ORANGE [US]

IN - KLASSEN HENRY [US]; SCHWARTZ MICHAEL [US]; YOUNG MICHAEL J [US]

TI - ISOLATION OF NEURAL STEM CELLS USING GANGLIOSIDES AND OTHER SURFACE MARKERS

AB - During the growth and study of NSCs, a range of molecules present on the surface of multipotent neural stem and progenitor cells (NSCs) were identified. These markers were identified using a number of human and murine neural stem cell lines, including retinal stem cells (RSCs). The NSC-specific markers identified included gene products as well as non-protein molecules and sugar epitopes not directly coded in the genome. Together with surface markers which were determined to be absent from the surface of hNSCs, the molecules described herein provide a means to enrich for neural stem cells, or neural progenitor subpopulations, particularly using combinatorial cell sorting strategies. These same molecules also represent targets for pharmacological manipulation of NSC populations and subpopulations, both in vivo and ex vivo. Furthermore, these molecules provide potential targets for therapeutic manipulation of other neural precursor-related cell types including malignant conditions as well as other diseases originating from, or preferentially affecting, various uncommitted or replication-competent cell types.

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GRANTED- 28-01-2009

PNFP - **EP1372716** B1 20090128

PA - THERAPURE BIOPHARMA INC [CA]

IN - MUELLER SUSAN G [CA]; BELL DAVID [CA]; MATTHEWS KATHRYN EMMA [CA]

TI - BLOOD CELL PRODUCTION VIA ACTIVATION OF CD163

AB - Methods and compositions for stimulating the growth, proliferation, differentiation and/or mobilization of stem and/or progenitor cells are described. The method involves administering an effective amount of a substance which can activate the CD163 hemoglobin scavenger receptor signal transduction pathway. The methods and compositions are useful in stimulating hematopoiesis and in treating a wide range of conditions including cytopenias, anemias and for use in preparing cells for transplantation.

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GRANTED- 14-01-2009

PNFP - **EP1323716** B1 20090114

PA - TAKEDA PHARMACEUTICAL [JP]

IN - OKAWA SHIGENORI [JP]; MIYAMOTO MASAOMI [JP]; OKURA MASAHIRO [JP]

TI - PROMOTERS FOR THE PROLIFERATION AND DIFFERENTIATION OF STEM CELLS AND/OR NEURON PRECURSOR CELLS

AB - An agent for promoting the proliferation or differentiation of a stem cell and/or neural progenitor cell, comprising a compound represented by Formula: <CHEM> wherein each of R<1> and R<2> is H, a hydrocarbon group or a heterocyclic group, or taken together with the adjacent carbon atom to form a ring, R<3> is H, a hydrocarbon group or a heterocyclic group, W is a group represented by Formula: <CHEM> wherein Ring A is an optionally substituted benzene ring, Ring B is an optionally substituted 5- to 7-membered nitrogen-containing heterocyclic ring, R<4> is an acyl group having an aliphatic hydrocarbon group, which is substituted by an aromatic group and may have a further substituent, or aromatic group, R<5> is H, C1-6 alkyl or acyl, R<4c> is an aromatic group, an aliphatic hydrocarbon group or acyl, and X is O or S; Y is O, S or NH, Ring C is an optionally substituted benzene ring, or a salt or prodrug thereof is provided

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GRANTED- 25-21-2009

PNFP - **EP1301795** B1 20090225

PA - ST JUDE CHILDRENS RES HOSPITAL [US]

IN - SORRENTINO BRIAN [US]; SCHUETZ JOHN [US]

TI - METHOD OF IDENTIFYING AND/OR ISOLATING STEM CELLS

AB - The present invention includes methods of identifying and/or isolating stem cells based on expression of BCRP. The present invention also describes methods of obtaining and/or using cell populations enriched for stem cells. In addition, methods are provided for diagnosing and/or prognosing leukemia, particularly human acute myelogenous leukemia (AML), through assaying for BCRP expression in leukemic cells.

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GRANTED- 09-12-2008

PNFP - **US7462483** B2 20081209

PA - GEN HOSPITAL CORP [US]

IN - SCADDEN DAVID T [US]; CHENG TAO [US]

TI - p27 and p21 in gene therapies

AB - The expansion of a population of stem cells or progenitor cells, or precursors thereof, may be accomplished by disrupting or inhibiting p21cip1/waf1 and/or p27, cyclin dependent kinase inhibitors. In the absence of p27 activity, progenitor cells move into the cell cycle and proliferate; whereas in the absence of p21 activity, stem cells move into the cell cycle and proliferate without losing their pluripotentiality (i.e., their ability to differentiate into the various cell lines found in the blood stream). Any type of stem cell or progenitor cell, or precursor thereof, including, but not limited to, hematopoietic, gastrointestinal, lung, neural, skin, muscle, cardiac muscle, renal, mesenchymal, embryonic, fetal, or liver cell may be used in accordance with the invention. The present invention provides a method of expanding a cell population, cells with decreased p27 and/or p21 activity, transgenic animals with a disrupted p27 and/or p21 gene, pharmaceutical compositions comprising the cells of the invention, and methods of using these cells in gene therapy (e.g., stem cell gene therapy) and bone marrow transplantation.

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GRANTED- 23-12-2008

PNFP - **US7468277** B2 20081223

PA - CORNELL RES FOUNDATION INC [US]; JAPAN SCIENCE & TECH CORP [JP]

IN - GOLDMAN STEVEN A [US]; OKANO HIDEYUKI [JP]

TI - Enriched preparation of human fetal multipotential neural stem cells

AB - The present invention relates to a method of separating multipotential neural progenitor cells from a mixed population of cell types. This method includes selecting a promoter which functions selectively in the neural progenitor cells, introducing a nucleic acid molecule encoding a fluorescent protein under control of said promoter into all cell types of the mixed population of cell types, allowing only the neural progenitor cells, but not other cell types, within the mixed population to express said fluorescent protein, identifying cells of the mixed population of cell types that are fluorescent, which are restricted to the neural progenitor cells, and separating the fluorescent cells from the mixed population of cell types, wherein the separated cells are restricted to the neural progenitor cells. The present invention also relates to an isolated human musashi promoter and an enriched preparation of isolated multipotential neural progenitor cells.

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GRANTED- 18-02-2009

PNFP - **EP1007631** B2 20090218

PA - OSIRIS THERAPEUTICS INC [US]

IN - PITTENGER MARK F [US]; GORDON STEPHEN L [US]; MACKAY ALASTAIR MORGAN [US]

TI - CARDIAC MUSCLE REGENERATION USING MESENCHYMAL STEM CELLS

AB - Disclosed is a method for producing cardiomyocytes in vivo by administering to the heart of an individual a cardiomyocyte producing amount of mesenchymal stem cells. These cells can be administered as a liquid injectible or as a preparation of cells in a matrix which is or becomes solid

or semi-solid. The cells can be genetically modified to enhance myocardial differentiation and integration. Also disclosed is a method for replacing cells ex vivo in a heart valve for implantation.

EMBRYONIC STEM CELLS- 6 DOCUMENTS

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GRANTED- 06-01-2009

PNFP - **US7473556** B2 20090106

PA - ISIS INNOVATION [GB]

IN - WALDMANN HERMAN [GB]; FAIRCHILD PAUL J [GB]; GARDNER RICHARD [GB];
BROOK FRANCES [GB]

TI - Method for producing dendritic cells

AB - Disclosed are embryonic stem cell-derived dendritic cells, genetically modified immature dendritic cells capable of maturation, as well as methods for the production of such cells. In one embodiment, the cells made be produced by a method comprising the steps of providing a population of embryonic stem cells; culturing the embryonic stem cells in the presence of a cytokine or combination of cytokines which brings about differentiation of the embryonic stem cells into dendritic cells; and recovering the dendritic cells from the culture. In a further embodiment, the cells may be genetically modified.

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GRANTED- 17-12-2008

PNFP - **GB2429718** B 20081217

PA - ES CELL INT PTE LTD [SG]

IN - MUMMERY CHRISTINE LINDSAY [NL]; PASSIER ROBERT [NL]

TI - Improved cardiomyocyte differentiation

AB - The present invention provides a method of enhancing the efficiency of differentiation of hES cells into cardiomyocytes which method comprises incubating the cells under serum free conditions. The method typically includes providing cells that induce cardiomyocyte differentiation by cell to cell contact. Differentiation to cardiomyocytes can occur via two routes, namely by spontaneous differentiation and by induced differentiation. Without wishing to be bound by theory, the present inventors hypothesise that, in the case of induced differentiation, END-2 cells, for instance, are needed for aggregation to cause local high cell densities and in inducing differentiation of nascent mesoderm. This second step could be enhanced in any human embryonic stem cell line leading to the prediction that it will work in lines other than hES. In cell lines that undergo spontaneous differentiation, it is hypothesised that local induction of embryoid bodies in endoderm occurs. Typically for induced differentiation this method will also comprise culturing the hES cell with a cell secreting at least one cardiomyocyte differentiation inducing factor or with an extracellular medium therefrom, under conditions that induce differentiation.

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GRANTED- 17-12-2008

PNFP - **GB2429211** B 20081217

PA - WICELL RES INST INC [US]

IN - XU REN-HE [US]; THOMSON JAMES A [US]

TI - Feeder independent extended culture of embryonic stem cells

AB - Previous methods for culturing human embryonic stem cells have required either fibroblast feeder cells or a medium which has been exposed to fibroblast feeder cells in order to maintain the stem cells in an undifferentiated state. It has now been found that if an antagonist of bone morphogenetic protein is added to the medium in which the stem cells are cultured, together with fibroblast growth factor, the stem cells will remain undifferentiated indefinitely, even without feeder cells or conditioned medium.

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GRANTED- 18-02-2009

PNFP - **GB2427876** B 20090218

PA - GOLDSTEIN RONALD S [IL]; REUBINOFF BENJAMIN EITHAN [IL]

IN - GOLDSTEIN RONALD S [IL]; REUBINOFF BENJAMIN EITHAN [IL]
TI - Methods for generating neuronal cells from human embryonic stem cells and uses thereof
AB - This invention relates generally to the production of human neuronal cells from human embryonic stem cells and/or human neuronal progenitor cells. In some embodiments, the human neuronal cells are neural crest cells. In other embodiments, the human neuronal cells are peripheral neurons. In other embodiments, the human neuronal cells are schwann cells. The invention provides methods of culturing and purifying human neuronal cells and uses thereof. Such uses include generating models of neuropathy, drug screening methods, and cell based therapeutic.

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GRANTED- 06-01-2009

PNFP - **US7473555** B2 20090106

PA - GERON CORP [US]

IN - MANDALAM RAMKUMAR [US]; FAOUZI SAADIA [US]; NADEAU ISABELLE [US];

PFENDLER-BONHAM KRISTINA [US]; RAO NAMITHA [US]; CARPENTER MELISSA K [CA];

RAMBHATLA LAKSHMI [US]; CHIU CHOY-PIK [US]

TI - Protocols for making hepatocytes from embryonic stem cells

AB - This disclosure provides a newly developed strategy and particular options for differentiating pluripotent stem cells into cells of the hepatocyte lineage. Many of the protocols are based on a strategy in which the cells are first differentiated into early germ layer cells, then into hepatocyte precursors, and then into mature cells. The cells obtained have morphological features and phenotypic markers characteristic of human adult hepatocytes. They also show evidence of cytochrome p450 enzyme activity, validating their utility for commercial applications such as drug screening, or use in the manufacture of medicaments and medical devices for clinical therapy.

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GRANTED- 09-12-2008

PNFP - **US7462757** B2 20081209

PA - TAKEDA CHEMICAL INDUSTRIES LTD [JP]

IN - SATOMI TOMOKO [JP]; TOZAWA RYUICHI [JP]; NAKATA MITSUGU [JP];

YASUHARA YOSHITAKA [JP]; TANIYAMA YOSHIO [JP]

TI - Animal with gene hypoexpression

AB - The present invention relates to non-human animal embryonic stem cells in which a lecithin:cholesterol acyltransferase-like lysophospholipase endogenous gene is inactivated; non-human animals deficient in expression of LLPL gene; methods of screening for prophylactics and/or therapeutic drug using the cells or the animals; and prophylactics and/or therapeutic drug obtainable by the screening. The non-human animal ES cells of the invention in which their LLPL gene is inactivated are very useful in creating non-human animals deficient in expression of LLPL gene. The LLPL expression deficient non-human animals of the invention can be disease models for such diseases caused by insufficiency of the biological activities of LLPL since the animals lack various biological activities inducible by LLPL. Therefore, the animals of the invention are useful in screening for prophylactics and/or therapeutic drug for various diseases resulting from LLPL deficiency, as well as in elucidating the causes of LLPL-related diseases and examining therapeutic methods for such diseases. The screening methods of the invention are capable of efficiently screening for prophylactics and/or therapeutic drug for various diseases resulting from LLPL deficiency.

INDUCED EMBRYONIC STEM CELLS/ DEDIFFERENTIATION OF CELLS - 0 documents